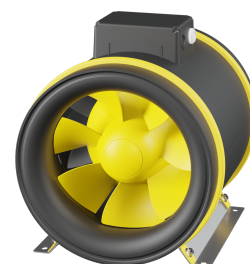


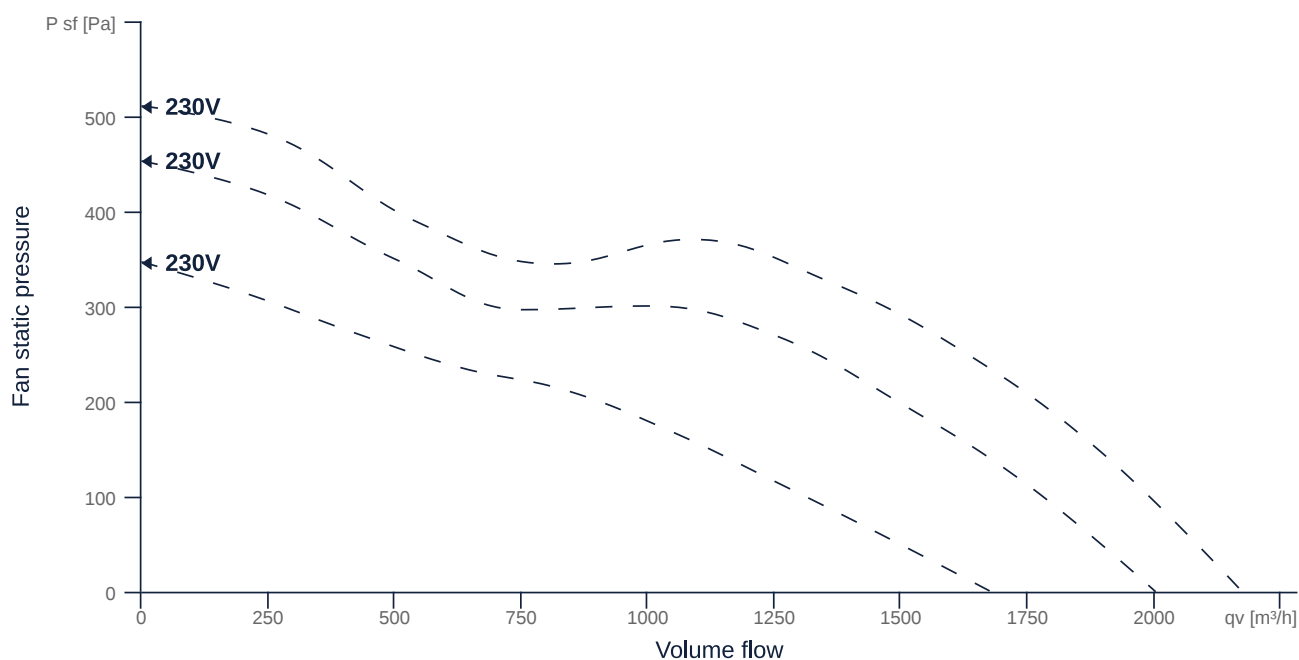
EM 280 E2M 01

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- Innovative, high-efficiency diagonal fan
- Optimally tuned, CFD-optimized aerodynamics
- Housing made of impact-resistant, reinforced polypropylene
- Robust AC motor, 3-steps controllable
- Conveyed medium temperature up to 60 °C in continuous operation
- The benchmark for efficiency since 2012



MAP



GENERAL DATA

Name	Value	Unit	Formula symbol
Duct size	-		WxH _{duct}
Pipe connection size (DN)	DN280		DN
Electrical protection (entire device)	20 A		fuse
Housing material	Plastic		mat _{casing}
Impeller material	Plastic		mat _{impeller}
IP-protection class (entire device)	IPX4		IP _{compl}
IP-Protection class terminal box	IP44		IP _{ebox}
Weight	8,56	kg	m
Fan type	Diagonal		Fan _{type}
Category / Installation situation	A		cat
Sound insulation	No		snd _{ins}
Rated voltage (entire device)	230.000000		U _{rated}
Phases (entire device)	1~		phase

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MAXIMAL DATA

Name	Value	Unit	Formula symbol
Max. power consumption (device)	239	W	$P_{ed, max}$
Max. operating current (device)	1.12	A	$I_{ed, max}$
Max. speed	2830	1/min	n_{max}
Max. stat. efficiency	49.7	%	η_{es}
Max. fan efficiency	52.9	%	η_e
Max. flowrate	2170	m ³ /h	$q_{v, max}$
Max. stat pressure	510	Pa	$p_{sf, max}$
Max. medium temperature	60	°C	$T_{m, max}$
Max. environment temperature	60	°C	$T_{amb, max}$
Min. environment temperature	-25	°C	$T_{amb, min}$
Min. voltage	230	V	U_{min}

MOTOR DATA

Name	Value		Unit	Formula symbol
	50 Hz	60 Hz		
Rated frequency (device)	50.000000			f
Motor type	AC 1~			phase
Installation	IRM (In)			install
Rotation direction	right			rotation
Isolation class	ISO F			ISO _{class}
Motor-protection	TAI			protect _{motor}
Protection class	IP00			IP _{motor}
Is pole-changeable	No			polexch
Type of power supply	AC 1~			pwr _{sup} _{motor}
Capacity condenser	10		μF	C _{cond}
Voltage condenser	450		V	VU _{cond}
Number of poles (1)	2.000000			num poles _{w1}
Rated voltage	230		V	U _{rated, f1}
Rated current	1.2		A	I _{rated, f1}
Shaft power	180		W	P _{out, f1}
Cos Phi	0.000000	0.000000		cos φ

PRODUCT INFORMATION

Name	Value	Unit	Formula symbol
Category / Installation situation	A		cat
Fan type	Diagonal		Fan _{type}

EM 280 E2M 01

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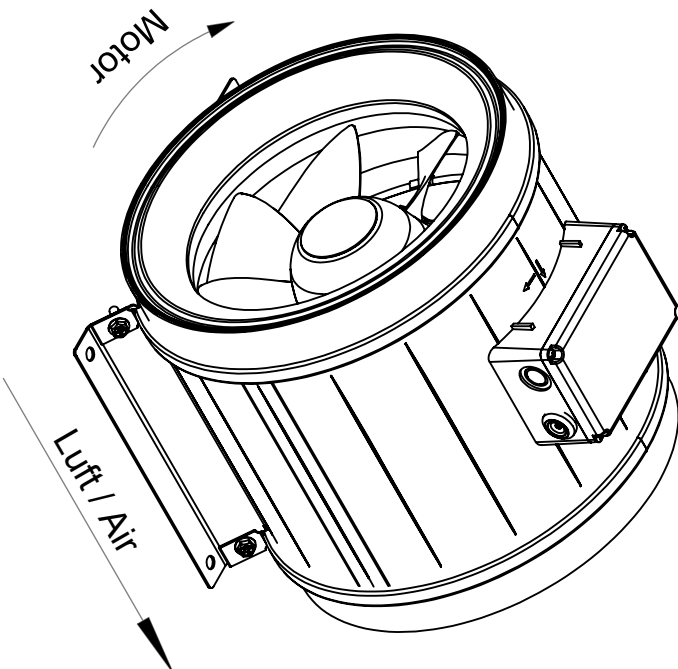
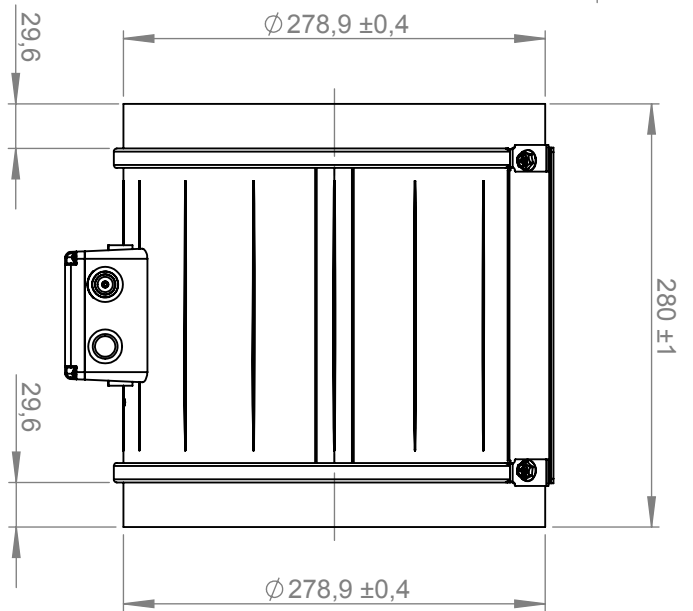
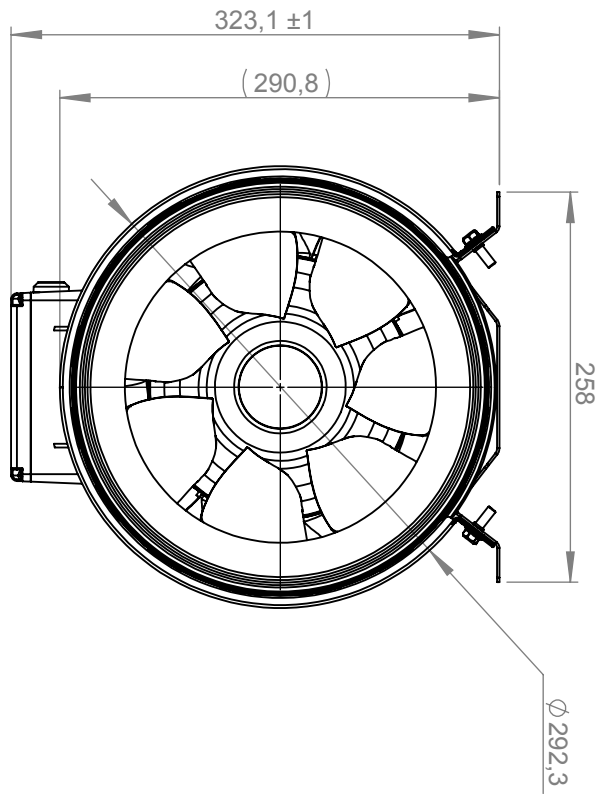
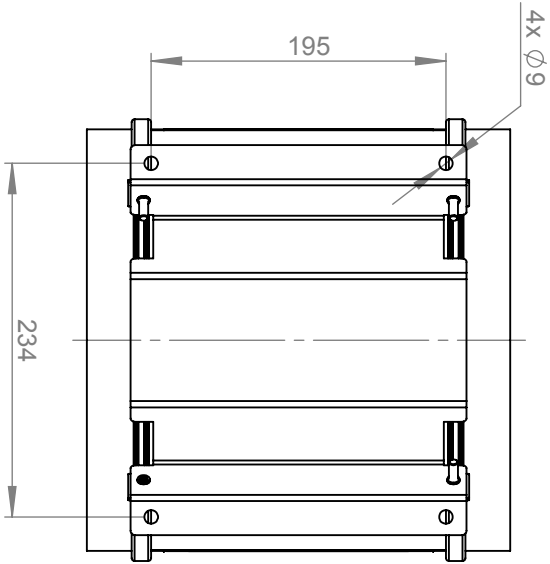
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ERP DATA

Name	Value	Unit	Formula symbol
Speed at the energy efficiency optimum	2777	1/min	n_{opt}
Efficiency level	51.3	%	N
Efficiency category	statisch		$cat_{efficiency}$
Input power of the motor at the energy efficiency optimum	0.22	kW	$P_{e, opt}$
Overall efficiency	68.7	%	η_{ges}
Measurement category	A		meas cat
Fan pressure at optimum energy efficiency point	362	Pa	$p_{f, opt}$
Flowrate at energy efficiency optimum	1213	m ³ /h	$q_{v, opt}$

SCHALTPLÄNE / MASSZEICHNUNGEN





1:5 A4 mm

Protection Mark
according to ISO 16016

General tolerances
DIN ISO 2768-mK

EM280E2M01+

ruck Ventilatoren
Max-Planck-Str. 5
D-97944 Boxberg

Drawn: m.dessler
Created: m.dessler
Changed: d.andree

27.06.14
27.06.14
25.03.15

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